

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandra, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/049,511	02/13/2002	Evelyne Delfourne	0512-1005	4068	
466	7590 05/16/2003				
YOUNG & THOMPSON			EXAMI	EXAMINER	
	23RD STREET 2ND FLO N, VA 22202	OOR	НАВТЕ, К	LAHSAY	
			ART UNIT	PAPER NUMBER	
			1624	G	
			DATE MAILED: 05/16/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary			DELFOURNE ET AL.				
		10/049,511					
	Office Action Summary	Examiner	Art Unit				
	The MAILING DATE of this communication a	Kahsay Habte, Ph. D.	1624				
Period fo		ippears on the cover sheet	·				
THE - Exte after - If the - If NO - Failu - Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a repend for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by started the period by the Office later than three months after the may be patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may reply within the statutory minimum of od will apply and will expire SIX (6) N tute, cause the application to become	v a reply be timely filed thirty (30) days will be considered timely. MONTHS from the mailing date of this communication.				
1)[	Responsive to communication(s) filed on _						
2a) <u></u> ☐	,	This action is non-final.					
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims	el Ex parte Quaylo, 1000	0.5. 11, 400 0.6. 2.10.				
4)⊠	Claim(s) 1-13 is/are pending in the applicat	ion.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	Claim(s) 13 is/are allowed.						
6)🛛	Claim(s) <u>1-12</u> is/are rejected.						
,	Claim(s) is/are objected to.						
•	Claim(s) are subject to restriction and	d/or election requirement.					
	ion Papers	inar					
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Applicant may not request that any objection to the drawing(s) be field in abeyance. See 37 GFK 1.05(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachme	• •	_					
2) 🔲 Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(	5) Notice	iew Summary (PTO-413) Paper No(s) e of Informal Patent Application (PTO-152)				
C Detect and	Trademark Office	<del></del>					

Application/Control Number: 10/049,511

Art Unit: 1624

#### **DETAILED ACTION**

#### **Abstract**

1. The abstract is defective because there is no chemical structure. It is recommended that applicants include the chemical structures in the abstract. The abstract only refers to compositions, even though applicants are claiming compounds and process of making.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsumato et al. (Tetrahedron Letters 41 (2000) 1667-1670, issue of March 4, 2000). The cited reference on page 1667 discloses 2 species (compound 4 i.e. X = CH, Y = N and compound 3 i.e. X = N, Y = CH) that are the same as applicant's compounds of formulae I or Ia. Said compounds (3 and 4) are the same as applicants compounds when applicants formula I or formula Ia has the following substituents:  $R_1 - R_7 = N$ 

## Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Application/Control Number: 10/049,511

Art Unit: 1624

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There has been recited a method of treating cancerous tumors in general, but the specification is not enabled.

The claim sets forth the treatment of cancerous tumor generally. However, there never has been a compound capable of treating cancerous tumor generally. There are compounds that treat a range of caners, but no one has ever been able to figure out how to get a compound to be effective against tumors generally, or even a majority of tumors. Thus, the existence of such a "silver bullet" is contrary to our present understanding in oncology. Even the most broadly effective antitumor agents are only effective against a small fraction of the vast number of different cancers known. This is true in part because cancers arise from a wide variety of sources, such as viruses (e.g. EBV, HHV-8, and HTLV-1), exposure to chemicals such as tobacco tars, genetic disorders, ionizing radiation, and a wide variety of failures of the body's cell growth regulatory mechanisms. Different types of cancers affect different organs and have different methods of growth and harm to the body, and different vulnerabilities. Thus, it is beyond the skill of oncologists today to get an agent to be effective against cancers

Application/Control Number: 10/049,511

Art Unit: 1624

generally, evidence that the level of skill in this art is low relative to the difficulty of such a task.

When the best efforts have failed to achieve a goal, it is reasonable for the PTO to require evidence that such a goal has been accomplished, *In re Ferens*, 163 USPQ 609. The failure of skilled scientists to achieve a goal is substantial evidence that achieving such a goal is beyond the skill of practitioners in that art, *Genentech vs Novo Nordisk*, 42 USPQ2nd 1001, 1006.

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

- a. In claim 1, the phrase "groups of type  $(C_1-C_6)$  alkyl" is indefinite. What groups are covered and what are not? How is it different from  $(C_1-C_6)$  alkyl?
- b. In claim 1 (lines 21-23), the bonds that connect CH<sub>2</sub>-Ar to N are not connected well.

Page 5

Application/Control Number: 10/049,511

Art Unit: 1624

- c. In claim 10 (formula V), it is not clear if "X" is bonded to the rest of the molecule.
- d. In claim 11 (formula V), the bond that connects N=-R4 to X-=-R5 is missing.

  As drawn, it is not clear if it is two moieties or just one moiety.
- e. In claim 11, the abbreviation "Boc" is not clear. What is the abbreviation stands for?
- f. Claim 9 provides for the use of the compounds in the manufacture of an anticancer medicament, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

## Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35

Page 6

Application/Control Number: 10/049,511

Art Unit: 1624

U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kahsay Habte, Ph. D. whose telephone number is (703) 308-4717. The examiner can normally be reached on M-F (9.00AM- 5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached on 703-308-4716. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Kahsay Habte, Ph. D.

Examiner Art Unit 1624 Mark L. Berch Primary Examiner Art Unit 1624

KH May 13, 2003